

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions:

Claims 1 through 18. (Cancelled)

19. (New) An apparatus comprising:

a primary voltage regulator to provide primary power to a load from at least one of a first power source or a second power source; and  
a secondary voltage regulator to selectively provide additional power to the load from the second power source based at least in part on availability of the second power source.

20. (New) The apparatus of claim 19 wherein the first power source comprises a battery and the second power source comprises an alternating current (AC) line adapter.

21. (New) The apparatus of claim 19 further comprising:

a feedback network coupled to the load, the primary voltage regulator, and the secondary voltage regulator, said feedback network to control the secondary voltage regulator to provide the additional power if a load power reaches a threshold level and the second power source is available.

22. (New) The apparatus of claim 21 wherein the feedback network comprises a portion of the primary voltage regulator.

23. (New) The apparatus of claim 19 further comprising:

a processor module, said processor module containing the primary voltage regulator and the load; and

a motherboard to which the processor module is coupled, said motherboard containing the secondary voltage regulator.

24. (New) The apparatus of claim 19 further comprising:

a tertiary voltage regulator to detachably couple with the load, said tertiary voltage regulator to selectively provide further additional power to the load from the second power source based at least in part on availability of the second power source.

25. (New) The apparatus of claim 24 further comprising:

a mobile computer, said mobile computer containing the primary voltage regulator, the secondary voltage regulator, and the load; and

a docking station to detachably receive the mobile computer, said docking station containing the tertiary voltage regulator.

26. (New) The apparatus of claim 25 further comprising:

a thermal dissipation device in the docking station to dissipate heat from the tertiary voltage regulator.

27. (New) The apparatus of claim 24 further comprising:

a feedback network to couple to the load, the primary voltage regulator, the secondary voltage regulator, and the tertiary voltage regulator, said feedback network to control the secondary voltage regulator to provide the additional power if a load power reaches a first threshold level and the second power source is available, and to control the tertiary voltage regulator to provide the further additional power if the load power reaches a second threshold level and both the tertiary voltage regulator and the second power source are available.

28. (New) The apparatus of claim 24 wherein the load has at least a low performance mode, a medium performance mode, and a high performance mode, and wherein the low performance mode uses the primary power, the medium performance mode uses the primary power plus the additional power, and the high performance mode uses the primary power plus the additional power plus the further additional power.

29. (New) A method comprising:

providing primary power with a primary voltage regulator to a load from at least one of a first power source or a second power source; and

selectively providing additional power with a secondary voltage regulator to the load from the second power source based at least in part on availability of the second power source.

30. (New) The method of claim 29 wherein selectively providing the additional power comprises:

monitoring a load power;

determining if the second power source is available; and

providing the additional power if the load power reaches a threshold level and the second power source is available.

31. (New) The method of claim 29 further comprising:

detachably coupling a tertiary voltage regulator with the load;

selectively providing further additional power with the tertiary voltage regulator to the load from the second power source based at least in part on availability of the second power source.

32. (New) The method of claim 31 further comprising:

dissipating heat from the tertiary voltage regulator with a thermal dissipation device.

33. (New) The method of claim 31 further comprising:

monitoring a load power;

wherein selectively providing the additional power comprises

determining if the second power source is available, and

providing the additional power if the load power reaches a first threshold level and the second power source is available; and

wherein selectively providing the further additional power comprises

determining if the tertiary power source is available, and

providing the further additional power if the load power reaches a second threshold level and both the tertiary voltage regulator and the second power source are available.

34. (New) A system comprising:

a processor module to contain a primary voltage regulator and a processor, the primary voltage regulator to provide primary power to the processor from at least one of a first power source or a second power source; and

a motherboard to couple the processor module with a secondary voltage regulator, said secondary voltage regulator to selectively provide additional power to the processor from the second power source based at least in part on availability of the second power source.

35. (New) The system of claim 34 further comprising:

a feedback network coupled to the processor, the primary voltage regulator, and the secondary voltage regulator, said feedback network to control the secondary voltage regulator to provide the additional power if a processor power reaches a threshold level and the second power source is available.

36. (New) The system of claim 35 wherein the feedback network comprises a portion of the primary voltage regulator.

37. (New) The system of claim 34 wherein the processor module and the motherboard comprise a mobile computer, the system further comprising:

a docking station to detachably receive the mobile computer; and

a tertiary voltage regulator in the docking station to detachably couple with the processor in the mobile computer, said tertiary voltage regulator to selectively provide further additional power to the processor from the second power source based at least in part on availability of the second power source.

38. (New) The system of claim 25 further comprising:

a thermal dissipation device in the docking station to dissipate heat from the tertiary voltage regulator.

39. (New) The system of claim 37 further comprising:

a feedback network to couple to the processor, the primary voltage regulator, the secondary voltage regulator, and the tertiary voltage regulator, said feedback network to control the secondary voltage regulator to provide the additional power if a processor power reaches a first threshold level and the second power source is available, and to control the tertiary voltage regulator to provide the further additional power if the processor power reaches a second threshold level and both the tertiary voltage regulator and the second power source are available.